# Leading a High Risk Project in a Conservative Way

Gus Guastaferro

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# Leading a High Risk Project in a Conservative Way

- Organize to Win
- Assign qualified people
- Study Lessons Learned on Past NASA Projects
- Establish adequate reserves
- Plan the work and Work the Plan
- Develop critical analysis of possible faults
- Pre-Plan work arounds and cost offsets
- Analyze the impact of every work around and offset
- Demand open communications

# Organize to Win

- Get a clear understanding of the objectives
- Remember, people make positive things happen—select the best—give clear assignments
- Establish early meeting to:
  - fix duplications
  - repair holes
  - settle interfaces
  - Build a high performance team

# Assign Qualified People

- Demand the Best
- Better to train outstanding people into new areas than to accept marginal people with some skills
- Provide your selected contractor with “smart buyer” image
- Change assignments to fit the challenge
- Make sure all team members understand the objectives

# Study Lessons Learned on Past NASA Projects

- Obtain a copy of the Exploration Project Report on Lessons Learned, August 30, 2004
- Assess the findings and recommendations
- Mitigate the risk assumed or experienced on past programs
- Adopt the things that worked well in the past

# Establish Adequate Reserves

- The Systems design and operational planning should have sufficient margin
- The Master Schedule needs to assess the critical path and preserve schedule ventilation
- Try to establish a realistic cost to complete by PDR.
- Provide for cost reserves to solve problems and reduce risk
- Remember the past, assess the present and apply the principles of the new NASA culture
- Have a cost offset list of things you can give up to develop resources to meet objectives with minimum risk

# Plan the Work—Work the Plan

- Set baselines and margins
- Assess frequently
- Make assessments visible to all
- Be willing to change the plan to meet the objectives and minimize risk
- Every task has an owner
- Communicate frequently

# Fault Analysis

- Continuously assess the design and procedures for risk
- Insist on testing and analyses to mitigate risk and improve safety
- Reward team members for identifying potential hazards or risk
- Celebrate successful corrections to critical problems
- No not accept –”We have had this problem before and all worked well”—Get clearly understood answers

# Prepare for Alternative Solutions

- Establish a problem oriented review process
- Utilize outside reviewers
- Do not be snowed by Power Point Presentations—examine the technical details
- Try to have a pre-planned solutions for most critical, high risk test or procedures
- Maintain a strong spares program
- Remember, your priority for decision making is:
  - Safety
  - Risk Mitigation
  - Program Objectives

# Demand Open Communications

- Successful Leaders are good communicators
- Operate on a “No Surprises” mantra
- Keep team members and management informed
- Seek the best of others
- The greatest risk to any project is the lack of an open communication environment